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What is claimed is:

1. A method of displaying physiological patient data from a cyclic physiological waveform, the patient data including a plurality of data points, each data point representing the amplitude of the physiological patient data, the method comprising the acts of:

acquiring the physiological patient data; and displaying the physiological patient data in a three dimensional representation.

- 2. A method as set forth in claim 1, wherein the physiological data iselectrocardiogram data.
- 3. A method as set forth in claim 1, wherein the physiological data is blood pressure data.
- 4. A method as set forth in claim 1, wherein the physiological data is cardiac output data.
- 5. A method as set forth in claim 1, wherein the physiological data is pulse oximetry data.
- 6. A method as set forth in claim 1, and further comprising the acts of storing the physiological patient data in a memory array.
- 7. A method as set forth in claim 6, wherein the memory array is a waveform array.
- 8. A method as set forth in claim 1, and further comprising the acts of parsing the physiological patient data into a series of waveforms.
 - 9. A method as set forth in claim 8, wherein the series of waveforms are median waveforms.

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- 10. A method as set forth in claim 8, wherein the act of displaying includes the act of plotting the parsed waveforms in a temporal alignment to allow detection of long term trends in physiological data.
- 11. A method as set forth in claim 1, wherein the act of displaying further includes the act of assigning a representative X coordinate, Y coordinate, and Z coordinate, to each data point and plotting each data point on the display to produce a three dimensional representation.
- 12. A method as set forth in claim 1, further including the act of parsing the data points into a series of median waveforms and wherein the act of displaying further includes the act of plotting the waveforms in a temporal alignment.
- 13. A method as set forth in claim 1, wherein the act of displaying further includes the act of color-coding the amplitude values of the data points in the relevant range.
- 14. A method as set forth in claim 13, wherein the relevant range is +0.5mV to 0.5mV.
- 15. A method of displaying physiological patient data from a cyclic physiological waveform, the method comprising:

acquiring the physiological patient data;

storing the physiological patient data in a memory array; and

displaying the physiological patient data in a three dimensional representation, the act of displaying including parsing the physiological patient data into a series of waveforms such that each successive waveform is plotted in a temporal alignment to allow detection of long term trends in physiological data, the act of parsing each waveform into a series of successive data points such that each data point has a coordinate that is plotted on the display to produce a three dimensional representation, each successive data point having a discrete amplitude, and assigning a color according to the amplitude of the data point if the amplitude is within the relevant range.

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- 16. A method as set forth in claim 15, wherein said physiological patient data is electrocardiogram data.
- 17. A method as set forth in claim 15, wherein the physiological data is blood pressure data.
- 18. A method as set forth in claim 15, wherein the physiological data is cardiac output data.
- 19. A method as set forth in claim 15, wherein the physiological data is pulse oximetry data.
- 20. A method as set forth in claim 15, wherein the memory array is a waveform array.
- 21. A method as set forth in claim 15, wherein the series of waveforms are median waveforms.
- 22. A method as set forth in claim 15, wherein the relevant range is +0.5mV to -0.5mV.
- 23. An apparatus for displaying physiological patient data from a cyclic physiological waveform, the data including a plurality of data points having an amplitude representing the value of the physiological parameter, the apparatus comprising:
 - a display; and
- a processor for producing a three dimensional representation of the physiological patient data.
- 24. An apparatus as set forth in claim 23, and further comprising a patient monitor device as the source of physiological patient data.

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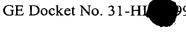
- 25. An apparatus as set forth in claim 24, wherein the patient monitor device includes a transducer for acquiring the physiological patient data from a patient.
- 26. An apparatus as set forth in claim 24, wherein the patient monitoring device is a Holter monitor.
- 27. An apparatus as set forth in claim 24, wherein the patient monitoring device is a stress-testing monitor.
- 28. An apparatus as set forth in claim 23, and further comprising a memory device connected to the processor.
- 29. An apparatus as set forth in claim 28, wherein the physiological patient data is stored as a memory array.
- 30. An apparatus as set forth in claim 29, wherein the memory array is a waveform array.
- 31. An apparatus as set forth in claim 23, wherein the display is a black and white display capable of displaying/generating shades of gray in between black and white.
- 32. An apparatus as set forth in claim 23, wherein the display is a red-blue-green color display.
- 33. An apparatus as set forth in claim 23, wherein the display has a plurality of pixels for displaying the respective coordinates.
 - 34. An apparatus as set forth in claim 23, wherein the processor further comprises software for animation and walk through of three-dimensional representations.
 - 35. An apparatus as set forth in claim 23, wherein the processor further comprises software for receive physiological data.

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- 36. An apparatus as set forth in claim 23, wherein the processor further comprises software to parse the physiological data.
- 37. An apparatus as set forth in claim 36, where in the physiological data is parsed into a series of waveforms.
- 38. An apparatus as set forth in claim 37, wherein the series of waveforms are median waveforms.
- 39. An apparatus as set forth in claim 23, wherein the processor further comprises software to generate a waveform display on the display.
- 40. An apparatus as set forth in claim 39, wherein the waveform display places the data points at respective pixels on the display.

A software program for generating a display of physiological data from cyclic physiological waveform, the software program comprising:

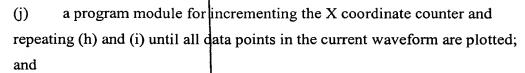
- a program module for acquiring the physiological patient data; (a)
- (b) a program module for storing the physiological patient data in a memory array;
- a program module for displaying a three dimensional representation; (c)
- a program module for setting the current waveform to the first (d) waveform in the waveform array;
- a program module for providing a Z coordinate counter and initializing the Z coordinate counter to zero;
- (f) a program module for providing a X coordinate counter and initializing the X coordinate counter to zero;
- (g) a program module for providing a Y coordinate counter and initializing the Y coordinate counter to zero;
- (h) a program module for providing a determining the pixel color based on the Y coordinate of the data point;
- a program module for plotting the current data point of the current (i) waveform at the current coordinate in the color determined in (h);



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- (k) a program module for incrementing the Z coordinate counter and repeating (h)-(j) until all waveforms in the waveform array are plotted.
- 42. An apparatus for displaying physiological patient data from a cyclic physiological waveform, the data including a plurality of data points having an amplitude representing the value of the physiological parameter, said apparatus comprising:

a display;

- a means for producing a three dimensional representation of the physiological patient data.
- 43. An apparatus as set forth in claim 42, and further comprising a patient monitor device as a source of physiological patient data.
- 44. An apparatus as set forth in claim 43, wherein the patient monitor device includes a transducer for acquiring the physiological patient data from a patient.
- 45. An apparatus as set forth in claim 43, wherein the patient monitor device is a Holter monitor.
- 46. An apparatus as set forth in claim 43, wherein the patient monitor device is a stress-testing monitor.
 - 47. An apparatus as set forth in claim 42, wherein the means for producing a three dimensional representation includes storing the physiological data.
- 48. An apparatus as set forth in claim 47, wherein the physiological patient data is stored in a memory array.
 - 49. An apparatus as set forth in claim 48, wherein the memory array is a waveform array.

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- 50. An apparatus as set forth in claim 42, wherein the display is a black and white display capable of displaying/generating shades of gray in between black and white.
- 51. An apparatus as set forth in claim 42 wherein the display is a red-blue-green color display.
- 52. An apparatus as set forth in claim 42, wherein the display has a plurality of pixels for displaying the respective coordinates.
- 53. An apparatus as set forth in claim 42, wherein the means for producing a three dimensional representation includes animating the three dimensional representation for analysis of the three dimensional representation.
- 54. An apparatus as set forth in claim 42, wherein the means for producing a three dimensional representation includes receiving physiological data.
- 55. An apparatus as set forth in claim 42, wherein the means for producing a three dimensional representation includes parsing the physiological data.
- 56. An apparatus as set forth in claim 55, where in the physiological data is parsed into a series of waveforms.
- 57. An apparatus as set forth in claim 56, wherein the series of waveforms are median waveforms.
- 58. An apparatus as set forth in claim 42, wherein the means for producing a three dimensional representation includes generating a waveform display on the display.
 - 59. An apparatus as set forth in claim 58, wherein the waveform display places the data points at respective pixels on the display.